

HISTORIC PROPERTY INVENTORY FORM

IDENTIFICATION SECTION

Field Site No. 183-NB OAHP No. Date Recorded 13-Feb-95
Site Name Historic Clearwell
Common
Field Recorder Philip M. Bogen, Evaluator: Darby Stapp
Owner's Name U.S. Department of Energy, Richland Operations Office
Address P.O. Box 550
City/State/Zip Code Richland, WA 99352

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Other (HABS, HAER, NHL)
☐ Local Designation

Photography

Photography Neg. No. Roll 9, Frame 6
(Roll No. & Frame No.)
View of South-East Facade
Date 14-Feb-94

Classification ☐ District ☐ Site ☐ Building ☒ Structure ☐ Object
Distric Status ☒ NR ☐ SR ☐ LR ☐ INV
Contributing ☒ Non-Contributing ☐
District/Thematic Nomination Name Hanford Site Manhattan Project and Cold War Era Historic District

Description Section

Materials & Features/Structural Types

Building Type Industrial
Plan Rectangular
Structural System Concrete Block
No. of Stories N/A

Roof Type

☐ Gable ☐ Hip
☒ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify)
☐ Gambrel
☐ Shed

Cladding (exterior Wall Surfaces)

- ☐ Log
☐ Horizontal Wood Siding
Rustic/Drop ☐
Clapboard ☐
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☒ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify)
☐ Other (specify)

Roof Material

☐ Wood Shingle
☐ Wood Shake
☐ Composition
☐ Slate
☐ Tar/Built-up
☐ Tile
☐ Metal (specify)
☒ Other (specify) Concrete
☐ Not visible

Foundation

☐ Log ☐ Concrete
☐ Post & Pier ☐ Block
☐ Stone ☒ Poured
☐ Brick ☐ Other (specify)
☐ Not visible

Integrity

(Include detailed description in

Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Changes to plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to windows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to original cladding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to interior	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify) <u></u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
111 21st Avenue Southwest, Post Office Box 48343
Olympia, Washington 98504-8343 (206)753-4011

LOCATION SECTION

Address 100-N Reactor Area, Building 183-NB
City/Town/County/Zip Code Richland, WA/Benton County/99352
Twp. 14N Range 26E Section 28 1/4 Section NE 1/4 1/4 Sec SW
Tax No./Parcel No. Acreage
Quadrangle or map name Coyote Rapids 7.5 min. series
UTM References Zone 11 Easting 303974 Northing 5172485
Plat/Block/Lot
Supplemental Map(s) 100-N Area Buildings



High Styles/Forms (Check one or more of the following)

<input type="checkbox"/> Greek Revival	<input type="checkbox"/> Spanish Colonial Revival/Mediterranean
<input type="checkbox"/> Gothic Revival	<input type="checkbox"/> Tudor Revival
<input type="checkbox"/> Italianate	<input type="checkbox"/> Craftsman/Arts & Crafts
<input type="checkbox"/> Second Empire	<input type="checkbox"/> Bungalow
<input type="checkbox"/> Romanesque Revival	<input type="checkbox"/> Prairie Style
<input type="checkbox"/> Stick Style	<input type="checkbox"/> Art Deco/Art Moderne
<input type="checkbox"/> Queen Anne	<input type="checkbox"/> Rustic Style
<input type="checkbox"/> Shingle Style	<input type="checkbox"/> International Style
<input type="checkbox"/> Colonial Revival	<input type="checkbox"/> Northwest Style
<input type="checkbox"/> Beaux Arts/Neoclassical	<input type="checkbox"/> Commercial Vernacular
<input type="checkbox"/> Chicago/Commercial Style	<input type="checkbox"/> Residential Vernacular (see below)
<input type="checkbox"/> American Foursquare	<input checked="" type="checkbox"/> Other (specify) <u></u>
<input type="checkbox"/> Mission Revival	<input type="checkbox"/> Industrial Vernacular

Vernacular House Types

<input type="checkbox"/> Gable Front	<input type="checkbox"/> Cross Gable
<input type="checkbox"/> Gable Front and Wing	<input type="checkbox"/> Pyramidal/Hipped
<input type="checkbox"/> Side Gable	<input type="checkbox"/> Other (specify) <u></u>

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☐ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Manufacturing/Industry
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science & Engineering
- ☐ Social Movements/Organizations
- ☐ Transportation
- ☒ Other (specify) Manhattan Project & Cold War Era
- ☒ **Study Unit Sub-Theme(s) (specify)**
Cold War/Nuclear Fuel Production
Reactor Operations, Water Treatment

Statement of Significance

Date of Construction 1963-1964 Architect/Engineer/Builder General Electric

☒ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.

☒ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

The 183-NB Clearwell is part of the 183-N Water Filter Plant complex, which supplied the filtered water for the demineralized water system and the potable water system at the 100-N Area. Raw water from the 182-N High Lift Station was pumped to the 183-NA Pumphouse where it was treated with chlorine gas (a biocide) and alum (a coagulant) in a mixing tank. From there, it was piped to a coagulator, where a polyelectrolyte was added as a coagulation aid, and then piped to the sand filters in the 183-N Building where filtration took place. The filtered water was pumped to the 183-NB Clearwell and eventually to the 850,000-gal filtered-water storage tank. This system supplied water for the following uses: horizontal control rod backup cooling, fuel-element storage basin cooling and cleanup, area service water, potable water system, and demineralization plant influent.

This property is not associated with an important person (Criterion B), does not possess any distinctive architectural features or methods of construction (Criterion C), and does not qualify under Criterion D as the principal source of important information. However, the 183-NB Clearwell qualifies under Criterion A due to its association with the Cold War production of plutonium at N Reactor, and its contribution to Reactor Operations, specifically the Water System. Therefore, it is the conclusion of the U.S. Department of Energy that the 183-NB Clearwell is eligible under Criterion A for inclusion on the National Register of Historic Places as a contributing property within the Hanford Site Manhattan Project and Cold War Era Historic District.

Description of Physical Appearance

The 183-NB Clearwell is a buried, rectangular, reinforced concrete structure with only the top surface visible 1 ft (0.3 m) above grade. The underground water basin has the capacity of 200,000 gal (757,120 L) and there are several pumps and associated control equipment mounted on top of the above ground concrete surface. The three clearwell pumps have a design rating of 7,500 gal/min (28,392 L/min) at an 80-ft (7.4-m) head available to pump filtered water from the Clearwell to the Filtered Water Storage Tank. No significant changes have been made to this structure and it is still in use.

The N Reactor UTM coordinates are as follows: Northeast corner - 303974E, 5172485N; southeast corner - 303974E, 5171639N; southwest corner - 303069E, 5171639N; northwest corner - 303069E, 5172485N.

Major Bibliographic References

Bechtel Hanford, Inc. 1994. *"Pre-Existing" Conditions Survey of Hanford Site Facilities to be Managed by Bechtel Hanford, Inc.* BHI-00221, Rev. 00, Phase II.

Newell Smith, Engineer, Columbia Energy & Environmental Services, Inc.

Rollie Warner, Engineer, Columbia Energy & Environmental Services, Inc.